DOCUMENT RESUME

ED 448 605 FL 026 539

AUTHOR	Piron, Claude
TITLE	Linguistic Communication: A Comparative Field Study. Esperanto Document 46A.
INSTITUTION	Universal Esperanto Association, Rotterdam (Netherlands).
ISSN	ISSN-0165-2575
PUB DATE	2000-00-00
NOTE	28p.
AVAILABLE FROM	Esperanto League for North America, P.O. Box 1129, El Cerrito, CA 94530 (25 dollars or ecus for subscriptions covering ten documents in the English series, single issues cost $2.50/$2.50 each).
PUB TYPE	Information Analyses (070)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Artificial Languages; Charts; *Esperanto; Global Approach; Interpretive Skills; *Operations Research; Second Language Instruction; Second Language Learning; *Translation

ABSTRACT

This paper explores the various options available for dealing with the demands and costs of communication in a world of many languages. Globalization has increased the demand for language services necessary to accomplish effective communication. It is argued that the day is not far off when the complications, costs, and inequalities of language use and ineffective language teaching will cross the threshold of what society can tolerate. The paper explores the best and most cost effective and efficient way, applying the lessons of operations research, to cope with this growing problem. The four options for dealing with this communications problem are laid out and discussed. They include the following: the UN system, using only a few languages; the multinational corporation option, using only one language; the European Union solution, using all languages; the interethnic language solution, using a language that has never been the language of any people, such as Swahili or Esperanto. These 4 systems are evaluated according to 12 criteria, such as duration of necessary language study; prior investment by governments; inequality and discrimination; language costs of meetings and document production; waiting time for document production, loss and distortion of information during translations, and others. It is concluded that Esperanto is by far the most efficient solution to this problem with a "total level of disadvantages" score of 5, while the multinational, European Union, and UN solutions have scores of 39, 65, and 76 respectively. (KFT)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 448 605

Universala Esperanto-Asocio

Linguistic Communication
A Comparative Field Study

Claude Piron

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

B. MacGill

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

FL026 539

Esperanto Document 46A

2000

Esperanto Documents describe the work, organization, culture and history of the movement for the adoption of the International Language Esperanto as a second language for international use. They are published in Esperanto, English and French.

The series replaces those documents of the Center for Research and Documentation on the Language Problem which dealt with Esperanto issues.

Reproduction and translation of this document are permitted provided that the source is cited.

Subscriptions (covering ten documents in the English series) are available for USD25.00 (postage included) for USA addresses from: Esperanto League for North America (ELNA), PO Box 1129, El Cerrito CA 94530, USA, and €25.00 (postage included) for the rest of the world from Universala Esperanto-Asocio (UEA), Nieuwe Binnenweg 176, NL-3015 BJ Rotterdam, the Netherlands. Single issues cost USD2.50 or €2.50 respectively, plus 10% postage (min. USD1.60, €2.50). 10% discount available for orders of minimum 3 copies of the same issue sent at the same time to the same address. For bulk orders, please contact UEA at the address above.

ISSN 0165-2575

Esperanto Document 46A (2000)

LINGUISTIC COMMUNICATION
A Comparative Field Study

Claude Piron

Our world is shrinking. International exchanges, commercial and cultural, are growing at a tremendous rate, and traveling to far away places is becoming a commonplace occurrence for many people for whom it was just unthinkable a few decades ago. At the same time, whole segments of populations are displaced in many parts of the world, refugees and people requesting political asylum are more and more numerous, as well as immigrants desperately looking for a standard of living they cannot expect to enjoy at home. As a result, language problems are developing in many areas. They are all too often ignored, just as the deplorable results of language teaching in schools are similarly ignored. In non-Germanic Europe, only one percent of the students are capable of expressing themselves correctly in the language they have been learning for six years at an average of four hours a week; in Asia, the corresponding proportion is one out of a thousand. But these facts do not appear to stimulate creative thinking. They are accepted with a deplorable resignation.

In international organizations, there is a strong demand for more language services, as can be readily ascertained in the hallways of the UN building in New York: a number of diplomats lobby there for the inclusion of Japanese, Hindi and other languages among the official ones. In Europe, languages are becoming more and more of a headache. In the European Union, many countries of Central and Eastern Europe have applied for membership. Politicians have responded quite favorably to their request, but they have failed to give much consideration to the language aspect of such an expansion, as if the phrase "good government thinks ahead" had lost its validity.

However, the day is no longer far off when the complications, inequalities and costs linked to language use, and ineffective language teaching, will cross the threshold of what society can tolerate. The aim of this paper is to give some help, drawing from research on the relevant situations and from factual data, to those who will have to define a strategy designed to cope with all these difficulties. The principles of operations research can be applied to the problem. The objective of having a fair, cost-effective and psychologically satisfying system of linguistic communication can be reached by different means that can be compared in the field, and a quantitative analysis can be attempted to evaluate the respective

advantages and disadvantages of the various alternatives according to a predetermined set of criteria. There is no dearth, nowadays, of situations in which people with different languages have to communicate. Nothing prevents us from comparing them.

FIVE APPROACHES TO INTERNATIONAL LINGUISTIC COMMUNICATION

Only situations in which the communication system in use affords a high level of precision will be considered in this paper. There are innumerable cases when people with different language backgrounds have to communicate and succeed more or less to do so by gestures, facial expressions, some kind of pidgin or broken English or the use of another language more or less mispronounced and distorted, but these are outside the scope of this study, which will be limited to exchanges of ideas with a high degree of sophistication. It would be impossible, in a short article, to deal with all the linguistic needs existing in the world. This paper will concentrate on the needs of such people as members of political assemblies (the UN General Assembly or the European Parliament, for instance) or of policy-defining bodies, such as the World Health Assembly, as well as of experts, advisers and staff members of international organizations, governmental or non-governmental, together with scientists, specialists and professionals meeting in congresses or in various organs of international associations created to deal with economic, social, cultural and other similarly complex problems.

The researcher who scans the various situations in which international communication at such a level occurs soon realizes that only five methods are currently in use. By order of frequency at the global level, these are:

1) the system applied by the United Nations, by most supranational institutions and by a large number of international associations and non-governmental organizations: the use of just a few languages, with simultaneous interpretation of oral exchanges and with translation of documents (this method will be called hereafter the UN system);

2) the system applied by many multinational companies: all participants use the same national language, usually English (hereafter called the multinational system);

3) the system applied by the European Union: the languages of all participating countries are accepted; simultaneous interpretation and document translation are provided (the European Union system);

4) the system applied by organizations which use an interethnic language that has never been the language of a given people (Swahili, Esperanto); for convenience, only the functioning of associations using Esperanto will be considered (the Esperanto system).

5) the Scandinavian or Swiss system: everybody uses their own language and there is no need to translate or interpret because all participants understand all languages in use. Such a system is used at the meetings of SAS, the Scandinavian Airlines, and relatively often in Switzerland in intellectual environments. Up to the '50s, it was the only method used in the Swiss Parliament, where everybody was supposed to understand French, German and Italian.

The fifth system will not be taken into consideration here because it is restricted to particular cultural environments. It does not meet the needs of communication that arise at the global level or in the European Union. Indeed, it can be adopted only when the number of languages does not exceed three or four, when the distance among cultures is not too wide, and when the education system devotes much time to language teaching.

THE CRITERIA

The main part of this article will be devoted to the criteria which can be applied to each system in order to determine how it compares with its rivals. The criteria listed below should provide a good general overview of the situation.

a) Duration of the Previous Language Study

The European Union system is the only one which does not require participants to have studied languages. In the other three systems a previous study of one or more languages is necessary for at least part of the persons who have to communicate. In the multinational system, all those who are not native speakers of English must learn that language. In the UN system, previous language study is indispensable for most participants, since only a minority are lucky enough to have their mother tongues included among the official or working languages. In the Esperanto system, it is assumed that everybody will have had to learn the language. While there are some children whose mother tongue is Esperanto, they are too few to be worth being taken into account.

Discussions in the lounges and hallways of the European Union headquarters deal more and more with the problems that will have to be addressed when people speaking Czech, Slovenian, Hungarian, Slovak, Polish, Serbo-Croatian, Estonian and other languages will take part in the meetings and in the work of the institution and of its numerous organs. A solution which is favorably viewed by many would consist in limiting the number of languages. If the European Union decided to do so, it would lose its advantage for the criterion considered here: speakers and producers of documents would be in the same situation as in the UN, having to engage in language study prior to being able to play their part in the activities.

Contrary to a widespread opinion, mastering a foreign language requires an enormous investment in time and nervous energy. For a person who must deal with delicate issues, or express a thought from the podium of a parliament or a general assembly, simply making oneself understood is not sufficient. What is necessary is a quality of expression which allows the speakers to convince, to argue, to touch the listeners' emotions all the while avoiding the risk of making a laughing stock of themselves. To quote a real case, a government representative who made a lengthy intervention in French on Cuba's policy referring to it as *la politique du Cuba* (instead of *la politique de Cuba*) had all participants connected to the French booth in a roar, because what he actually pronounced was *du cul bas*, which means – excuse my French, but how can I avoid being accurate? – "the low arse policy". This delegate had a remarkable mastery of the French language. Indeed, this was his only mistake and it is highly understandable, since the phrase *la politique du...* would have been correct with many country names. But it cannot be used with Cuba. This flaw was more than just unfortunate. In politics, you can seldom afford to be laughable. In such a case, people do not remember what you said, but the funny way in which you said it. The fact that after 2000 hours of study and four times as many hours of practice of the language you can still fall into such a pitfall goes a long way to show what it means to be condemned to use a foreign language in public.

A foreign language cannot be said to be mastered at the level required in international settings until one has accumulated at least 10,000 hours of study and practice. Only Esperanto differs from other languages in ease of acquisition: a mastery level can be reached in 150 to 220 hours (see criterion i below).

b) Previous Government Investment

The criterion that has just been described concerns people called upon to express themselves, orally or in writing, in an international environment. The language study they have to carry out would not be possible without a government investment. All through the world language teaching absorbs huge amounts of money. If the organization of such teaching is indispensable to guarantee an efficient representation of a country or a political party at the international level, it represents a factor to be taken into account. The European Union system, and, in the present situation, the Esperanto one, allow considerable savings in that respect. However, if, tomorrow, the Finnish or Greek representatives in the European Parliament were required to express themselves in English or German, their countries would have to invest much greater amounts in language teaching than those spent today. They would have to ensure a high level of knowledge of those languages in a fairly wide population base in order not to suffer form any inferiority, as compared to countries with "powerful" languages, in the selection of their representatives.

c) Previous Investment in the Concerned Institutions

Two of the language systems impose specific investments that are not required by the other two. The multinational companies which use a single language do not have to earmark any amount for language services (as far as internal communication is concerned; public relations and advertising are outside the scope of this study). The same remark applies to the Esperanto associations.

Resorting to translation and interpretation services requires a substantial increase in personnel, proportionate to the number of languages. The fields in which investments must be made before a new language system can be applied are essentially:

– engaging and training of linguistic staff;

– adaptation of meeting space to simultaneous interpretation (if the current system remains in place when the formerly communist countries join the European Union, at least six interpreter's booths will need to be added to each meeting room; the wiring of those booths and of the headphones and microphones will have to take into account all possible language combinations);

– organization of a secretarial service for each language, with all that it entails: engaging typists, acquiring computers and word processing software adapted to each language, printers, photocopiers, and other similar equipment;

– support services for translators: libraries with books in all the relevant languages; bibliographic services; electronic research tools; a terminology unit, etc.

– office space for typing and translation services, with all related expenses: furniture, heating, telephones, electrical power, elevators, document transmission, space for documents in the various languages, etc;

– part of the administrative expenditure related to the plurality of languages: the growth in language and secretarial staff implies an increase in personnel administration, as well as in security, accounting, medical services, conference services and, if necessary (as in the United Nations) travel services.

d) Inequality and Discrimination

Some language policies discriminate, others do not. If the only language is English, as in the multinational system, native speakers of English enjoy a linguistic advantage over their colleagues: the latter are put in an inferior position simply because of their origin.

The most discriminatory system is that of the UN and the institutions and organizations which apply a similar method of communication. In the UN, a Belgian delegate has the right to use his native language if it is French, but has no such right if he has spent his childhood in the Dutch speaking part of the country. A Syrian, an Argentinean or a Chinese may express themselves with all the eloquence and convincing power their languages allow, but

an Afghan, a Brazilian or a Japanese does not enjoy the same right. For countries whose languages have no official status, the addition of a new working language increases inequality in that it increases the number of possible competitors better armed to make their positions prevail. Strangely enough, this relative loss of influence is paid by the victims themselves. The addition of a language increases the budget, but the disfavored Member States' contributions do not diminish; their percentage of the now augmented budget remains the same. The suggestion that a Member State's financial contribution should take into account its linguistic privilege or lack of privilege has never been made.

In the European Union, the present system can be considered to guarantee equality among peoples. But a few reservations should be introduced.

– First, in the Secretariat, Dutch, Greek, Finnish and the other "non powerful" languages are practically unused. Some languages are thus "more equal than others", both when a candidate is trying to obtain a position in a European Union office and when a citizen or member of parliament has to deal with the administration.

– Second, there are practically no translators capable of handling language combinations such as Portuguese-Greek, Danish-Portuguese, Dutch-Finnish, and so on. For such languages it is resorted to a "relay" language: the Portuguese interpreter listens, not to the Greek or Dutch speaker, whom he cannot understand, but to the colleague who translates what is being said into English. Thus, what is heard is not a direct rendering of the speaker's intervention, but a Portuguese version of the English translation of the original Greek or Dutch speech. According to a UN sponsored study of the language services of all organizations linked to the United Nations, "at scientific meetings the loss of information through 'relay' is of at least 50%" [1, par. 93].

The representatives of the various States are not placed at the same level, since a Finn, a Dane, a Greek, a Portuguese, and tomorrow perhaps a Hungarian or a Slovenian, have fewer chances of being fully and exactly interpreted, as compared to a colleague with a "powerful" language. Simultaneous interpretation always involves a certain loss and distortion of what is stated in the original language; when the interpretation is doubled, so are the chances of loss and distortion.

– Third, the European Trademark Registry in Madrid does not use all the languages of the Union.

The problem of inequality, currently of little importance in the European Union, will assume the importance it has in the UN if a decision is taken to limit the number of languages.

The Esperanto system avoids all kinds of discrimination. Everybody uses a language they have studied in a limited and relatively equivalent duration whatever the native language. Since no one is using the language of his own country

or linguistic area, no one enjoys any superiority in expressing themselves just because they belong to this or that people. Such an advantage was emphasized in a report of the League of Nations:

"At the Secretariat of the League of Nations we have had the experience of the International Conference of School Authorities, which used Esperanto as its language, (...) What was most impressive was the equality that the use of a single language achieves in such a meeting. Every one finds himself at the same level, and the delegate from Peking or The Hague can express himself with the same force of conviction as his colleagues from Paris or London." [2, p. 22]

Observation of international meetings and congresses reveals that a correlation exists between the right to use one's mother tongue and the frequency with which one asks for the floor. A person who cannot speak his own language intervenes less often in a debate. There are only two means to place people from different countries on the same level:

- everybody uses his mother tongue;
- nobody uses his mother tongue.

Theoretically, along with the European Union and the Esperanto systems there is a third way of avoiding discrimination: only a few languages would be allowed, but every speaker or writer of a document would be obliged to use another language than his own. In this system, if, for instance, the European Union limited the working languages to English, French and German, a British citizen would not be allowed to make a speech in English, he would have to express himself in French or German. "Less equal colleagues" would thus cease to exist. Unfortunately, power politics being what they are, the odds are strongly against the adoption of such an alternative, which would reestablish equality.

e) Linguistic Cost of a Session

Interpretation is the main item in the language costs of a session. The cost consists essentially of the salary or fee paid to the interpreters and technicians. The larger the number of languages, the higher the costs will be. Thus the highest cost is linked to the European Union system. Indeed, the gap between this system and the others is, in this regard, enormous. The multinational and Esperanto systems are free of any cost for this item.

f) Cost of Producing a Document

The wider the language spectrum, the higher the cost of documentation. The costs include, above all, the salary of translators, proofreaders, technical experts, librarians, reference staff (where such a personnel exists, as in the UN) and the typing staff, on the one hand, and the operating expenses (paper, computer use and depreciation, office maintenance, etc.).

A fact generally unknown outside of translation units is that a translator has often to do some kind of detective work. In many cases, one word includes several items of information, but the meanings so amalgamated differ from one language to the other. For instance, the words *his secretary*, in English, gives us information on the boss's sex, but not on the secretary's. In French, it's the opposite. *Son secrétaire* means "his or her male secretary"; if the secretary is a woman, it will be sa secrétaire, but French gives no clue as to whether it is the secretary of a man or of a woman. A translator who has to render into another language the words *his secretary* has to find out the secretary's sex. Names may help, but not always, especially when the text refers to persons from a distant culture. Is Secretary Tan Buting, a Chinese, a man or a woman? You cannot translate those few words into Spanish, French, Italian and many other languages without doing some research to get an answer to the question. In many cultures, assigning a wrong sex to a person may be felt as unacceptably offensive.

Incidentally, this detective work imposed on translators is one of the reason why computers cannot do the job. Ninety percent of a translator's time are devoted to solving problems that have little to do with what can be automated. What can be done by a computer can be done by a human translator in very little time, say ten percent of his or her working day. But the research that accurate translation demands requires much creativity and ingenuity that are beyond the capabilities of the best software network of artificial intelligence.

The documents that have to be translated belong to the most diverse categories. They include, for instance, correspondence. In the plurilingual institutions, many letters are received in a language that is not understandable for the addressee or the staff member who has to reply. Other documents that require translation are:

a) basic documents, such as, in the European Union, the Treaty of Maastricht; this category includes all the texts having legal implications which govern the life of the institution;

b) periodic reports (for instance, in the UN or the European institutions, on the economic, social, cultural, educational and health situation);

c) studies commissioned to this or that secretariat by higher bodies;

d) progress reports on projects that have been undertaken;

e) minutes and records of meetings, as well as resolutions adopted by organs with deciding power;

f) working papers for various committees, panels, working groups, etc.

The cost of producing the documents in all working languages depends on the translators' productivity. Unfortunately, it is practically impossible to get an idea of the average production, since statistics are generally configured in a format designed to conceal the low productivity of the translation units. For instance, a "50 page" report sent to the translation unit with a request to make ten one-word corrections is recorded on the receiving log with the total of pages. The work can be done in a few minutes, but the translation office will record it as a 50 page

document. Such cheating is probably inevitable, in so far as no institution, at any level, has an interest in letting the outside world know exactly how much the use of many languages costs. A secretary who inflates the figures in such a way will never be blamed.

A conscientious translator cannot translate more than five or six double space A4 pages per day. At the UN, the fastest translation unit, the English one, has an average productivity, per translator, of 2331 words per day. The slowest are the Chinese, with an average daily productivity of 843 words. The medium one is the French unit, with an average of 1517 words. ("English unit" means: those who translate from other languages into English; x words means so many words in the original text). [3, table 9].

The average of 7000 words a day per translator at the Council of Ministers of the European Union, quoted in the press [4, p. 6], is not credible for anybody who has been an insider in the translation world. Such a figure is possible only at a very low qualitative level, so low that if it were true, the money earmarked for such translation would be a complete waste. However, facts point to this being a possibility. The first version of the Treaty of Maastricht – a lengthy document (253 pages), and a very important one since it defined the organization of the European Union and all citizens of the member countries were called upon to determine by a vote if they approved or rejected it – had to be withdrawn from all bookstores and libraries because its content varied from one language to the next. The text had to be fully retranslated and reprinted. The cost of the effort involved in doing twice the same work has never been publicly stated.

Translation is expensive. In the UN system, every thousand words in an original text, in 1978 (I haven't been able to find more recent figures), cost US$1698 for translation in seven languages, or more than a dollar and fifty cents per word. Such a sum seems more realistic than the figure of 36 cents a word given for the European Union. Apparently, the European Union translates daily 3,150,000 words, which means that translation costs there amount to US$ 1,134,000 per day.[4]

g) Waiting Time for a Document

In a multilingual organization, documents cannot be immediately available in all working languages. The time factor should also be included in the analysis.

In the UN system, preparing a 25-page single spaced document (14,000 words) in the six official languages requires 63,9 translator workdays, plus 22,9 workdays for revision [3, table 9]. If typing time is included, the total becomes 98,8 workdays. This does not mean that it takes a hundred days for the document to be ready: translators in different languages work simultaneously, and the urgent texts are divided among translators, as is also done with a very long text. The man in the street is not aware of how much effort is invested in a result which is far from being impressive: a hundred workdays to communicate, often imperfectly, the

contents of just 25 pages, is this justifiable? No wonder that translation units are reluctant to present honest statistics.

According to our UN source [3], if the text is not urgent, it takes 24 days for it to be available in all languages. If it is urgent and receives a high degree of priority, it can be ready in about six days.

In the multinational and Esperanto systems a document is available as soon as it is written, since there is no need to have it in any other language than the original.

h) Loss and Distortion

Communication occurs only when the listener of a speech or the reader of a document accurately takes in the meaning of the speaker or author. Passing from one language to another implies a difference between what the original purports to convey and what is actually transmitted. In the multinational and Esperanto systems, there is no risk of loss or distortion, since listeners and readers deal only with originals. If doubts or misunderstandings appear, they are not due to the system, but to the language level of the individuals involved.

The situation is quite different with the UN and the European Union systems, which rely heavily on translation and interpretation. As has been noted above, in the relay system of simultaneous interpretation the loss of information can reach 50%. But, even if the transition from the source to the target language is direct, a loss of 10% and a distortion of 2 or 3 % are considered normal. The conditions of simultaneous interpretation are such that it is impossible to transmit a speech in another language without gaps and errors while it is being delivered. The interpreter must not only have a good delivery, a perfect mastery of both languages, a quick mind and sharp hearing, he must also be fairly familiar with the subject in order to repeat in the target language everything said in the original using the appropriate technical terminology and without dropping important shades of meaning. Such a combination of deep linguistic competence and vast technical knowledge can rarely be found. Hence the large number of inaccurate interpreters:

"Moreover, the expansion in recent years of multilingual conferences both within the United Nations system and outside it, and their growing complexity – e.g. the increasing tendency to form *ad hoc* working groups, drafting committees, etc., needing language services (a single conference can generate half a dozen or more such auxiliary bodies, several or even all of which may meet concurrently) –, has led to an increase in the demand for language staff and thus aggravated the shortage. With varying degree of emphasis, the organizations covered in this study are unanimous in stating that it has become increasingly difficult in recent years to recruit competent language staff. One large agency states that "it has always been difficult to find enough *qualified* language staff; in the last few years, however, with the increasing number of meetings in all the organizations and the

lack of co-ordination between these organizations, the problem has often been how to find enough interpreters or conference translators, regardless of their quality"." [1, par. 89].

"Several organizations stress the linguistic difficulties arising from the specialized nature of many of the subjects discussed at meetings in the United Nations system. One of them writes that "it seems that in a technical organization (...) texts become increasingly specialized and difficult on account of constantly-developing technique". Even in a non-technical context, problems of terminology are constantly arising, and require highly skilled staff to deal with them. These factors add to the difficulty of acquiring competent language staff." [1, par. 94].

The distortions and errors found in the simultaneous interpretation of speeches and interventions have their equivalents in written translation as well, if only because translators often work under the pressure of urgency. The above story on the Treaty of Maastricht shows that even texts of paramount importance are not protected against inaccurate translation. The United Nations Charter provides another example. In English, article 33 applies to *"any dispute, the continuation of which is likely to endanger the maintenance of international peace and security"*, but in French to *"tout différend dont la prolongation est susceptible de menacer le maintien de la paix et de la sécurité internationals"*, just as in Spanish: *"una controversia cuya continuaciān sea susceptible de poner en peligro..."*. Whereas the French and Spanish texts, which have the same legal force – they are "equally authentic", states the last article – consider a simple possibility, the English version requires a probability, which is quite different. The shade of meaning is important since this article defines whether or not the Security Council should get involved. The other authentic texts do not clarify the Security Council's task: the Russian uses the words *moglo by,* "could" (endanger peace and security) and the Chinese *zuyi,* "sufficient to" (endanger them). The various versions of this article run the gamut from "sufficient" to "probable" passing through "possible".

If important legal texts contain such erroneous translations, how much more frequently do such mistakes appear in texts without any particular importance? Such inaccuracies must be viewed against the background or the extremely high cost of translation. A document of the European Union discussed at some point, in its French version, *"les avions sans pilote qui prennent pour cibles les centrales nucléaires"* which means "pilotless aircrafts which take as targets nuclear power plants". The original referred to *"airplanes flying by automatic pilot over nuclear power plants"*. [5] Such a potentially dangerous error may be due to the relay system.

As a matter of fact, such a system, mentioned above only in the context of simultaneous interpretation, also applies to written translations. A translation from a Greek or Finnish text into Danish or Portuguese is often, actually, a translation from its English or its French version. Such a procedure will become ever more frequent when languages such as Hungarian, Estonian and Czech are introduced,

which will inevitably increase the proportion of inaccurate translations. The cost/effectiveness ratio evolves in an unfavorable way with the multiplication of languages: the more languages in use, the more costly the translation and the lower its quality.

i) Frequency and Importance of Language Handicap During Sessions

The phrase *language handicap* refers to the sum of traits of the language being used which interfere with fluent oral or written expression. The greater the language handicap, the less comfortable the person feels in the language he or she has to use. Those who express themselves in their mother tongue, obviously, suffer no language handicap. But when speakers or writers do not have complete command over the language, they may have a very clear idea of what they want to convey without being able to transmit the idea with the clarity and convincing power they aim at, because they do not find the correct words right away, they use less appropriate ones that make them feel grammatically more secure, they express themselves in a less refined language than if they could use their own, they give up rendering delicate nuances which may be quite important, and their speeches or texts have much less force than they would have were they allowed to use their mother tongue. Further, mispronunciation can cause confusion or make the speaker sound ridiculous (for instance, saying "My Government sinks" instead of "My Government thinks") with all the negative ensuing consequences. Such a flaw is a result of a language handicap which, by its very nature, is spared to those who can use their mother tongue.

The European Parliament has recognized the enormous handicap imposed on anybody deprived of the right to use his own language:

"Whoever has struggled to learn a foreign language knows that a true capacity to speak one is a rare occurrence. As a rule, the mother tongue is the only one which can be mastered with all its subtlety. There is no doubt that one finds oneself *politically* most forceful when expressing oneself in one's own language. Using the mother tongue is to enjoy an advantage over those who – willingly or not – are burdened with a language which is not their own." [6, p. 10].

It is thus easy to understand why so many states reacted angrily when, on December 14, 1994, the French Minister for European Affairs, Alain Lamassoure, announced that France would use its term as president to propose "a policy of five working languages". The Greek Government, for example, launched a heated protest, while the Athenian press accused France of wanting to create "a two-speed Europe also in the language field".[5] Language handicap is the most important factor to take into account when comparing the various alternatives in language policy.

Such a handicap especially affects the institutions which have adopted the UN system, in which the majority is deprived of its right to use its native tongue. No

language handicap exists at present in the European Union, but if, as many suggest, the number of working languages is reduced, it will affect a certain proportion of member states.

Language handicap belongs to the field of neuropsychology. It is the result of factors interfering with the regular flow of nervous energy in the brain. All languages represent a network of complex programs, in the "computerese" sense of the word. Quite often a program is disturbed by inhibitory subprograms which prevent them from running smoothly. If you ask a random sample of non-Anglo-Saxons who have studied English for many years what the plural of *sheep* is, you will discover that eight out of ten answer *sheeps*. The error comes from the fact that the word *sheep* should be linked to a subprogram stating: in this case cancel the general program "plural = + *s*". Assimilating and maintaining in operating condition the vast number of complex subprograms that should be associated to many linguistic items for English (and most other languages) to be used properly is beyond the capability of most people if it is not the language prevalent in the environment.

This is the main reason why a minimum of 10,000 hours of study and practice are needed to possess any national language. If readers doubt the validity of that figure, they may get a confirmation by observing the language of a six or seven year old child speaking its mother tongue. Even after some 10,000 hours of full immersion in the language, it will utter such forms as *I comed, he falled, mouses, foots, when I'll go, it's mines,* etc. It should be emphasized that none of those errors are due to intellectual immaturity. As a matter of fact, the child is more logical than the official language. The flaws are due to the fact that while the general programs are operating, the subprograms are not. They have not yet been installed in the brain or they are still unstable or poorly connected to the neurological structures activated by linguistic expression.

Ninety to ninety-five percent of the time invested in the study of a national language are devoted to the effort needed to transform the subprograms into reflexes. As long as they do not operate unconsciously, without effort, the language cannot be said to be mastered. The brain tends to generalize spontaneously all linguistic signs it has perceived. So a child or a foreigner who has (unconsciously) registered the regular appearance of a final *-s* in the series *yours, hers, ours, theirs* will have the natural reflex to apply the same pattern to the first person singular: he or she will say *mines*. For the correct form to be introduced, a new, conditioned reflex, has to override the natural one.

A language which lacks diverting subprograms and is only made up of general programs (for instance, just one program for the plural, just one program for the present tense of all verbs, just one program to derive an adjective from a noun, and so on) respects without exception the natural tendency to generalize linguistic traits. As a result, both acquisition and use of the language are considerably easier. Esperanto is such a language.

If it frees its user of language handicap, it is also because it is extremely flexible. Thought has not to be channeled into predetermined patterns. To express the idea "he thanks me", the user of Esperanto can follow the English word order *(li dankas min)* , the German structure *(li dankas al mi)* or the French one *(li min dankas).* A century of practice has proven that this freedom enhances linguistic comfort without hampering mutual comprehension. A similar freedom can be found in the various ways a thought can be expressed. The idea "he went to the hotel by bus", for instance, can be expressed in many ways that have no equivalent in other languages, but which are immediately understandable once you have learned the meaning of endings and prepositions: *li iris al la hotelo per buso, li iris hotelen buse, al la hotelo li busis, li buse alhotelis,* etc. The consequence of this freedom, added to the regularity of patterns and the lack of exceptions, is that language handicap is practically never experienced by the user of Esperanto. This explains what Prof. Pierre Janton observed in his research on the language:

"Although it is not a native language, it is not a foreign language either. A mature user of Esperanto always feels it as his or her own, which, except for the rare cases of perfect bilingualism, cannot be said of any other language that has had to be learned." [7]

As a result, an observer at a meeting held in Esperanto is immediately struck by the fact that linguistic handicap does not appear. To the linguistic and neurological reasons that have just been explained, another factor, a purely psychological one, has to be added: every speaker of Esperanto knows that the language is nobody's mother tongue and that there is no linguistically superior people which could say, or think: "this is right, this is wrong" about the phrasing, the grammar, the vocabulary. The speaker never feels inferior for belonging to an ethnic group different from the group which has defined the language standards. This represents an enormous contrast with the multinational and UN systems, in which those who do not have the right mother tongue cannot but feel in some way inferior (unless they are so conceited that they have no idea of their actual, possibly low, level, which is not too rare an occurrence).

In sessions held in Esperanto, speakers express themselves freely and no correlation can be found between the nature of the mother tongue and the frequency with which participants ask for the floor. Therefore although the language has been learned, the observer has the feeling of a human environment in which everybody speaks their mother tongue. This is the aspect which most distinguishes the Esperanto system from the other three.

j) Language Handicap in Reading

Reading documents is an appreciable part of any international activity calling for meetings and discussions. There is a great difference between reading and listening as far as comprehension is concerned. The figures produced in the table below

for this criterion represent an average: this is the only way to cope with the large individual variations in understanding the language in which the participants to the session receive their documents.

In the UN system many delegates have access to documents in a language they can read without great difficulty, even if they speak it poorly. The reader may be surprised to realize that in the table presented below the handicap for reading comprehension is higher for the multinational system than for the UN. This reflects the results of studies which have shown that English's inherent ambiguity often gives rise to miscomprehension. For example, there is nothing extraordinary in understanding *Japanese encephalitis vaccine* as meaning "an encephalitis vaccine produced in Japan" whereas it refers to a vaccine produced anywhere to protect from the specific disease called *Japanese encephalitis.* In Esperanto – the other monolingual system among those currently in use – the expression does not require more syllables, but it avoids the ambiguity: *japana encefalit-vakcino* and *japan-encefalita vakcino* clearly indicate what refers to what.

The speed with which English evolves, along with a tendency of its writers to use slang expressions even in political and technical texts, creates problems for speakers of other languages. In a recent study 80% of those interviewed, while frequently using English in their professional life, could not understand the phrase *Business class is a tough act to follow* in an article from the *International Herald Tribune* about the general tendency of air travelers to choose first class less often.

k) Limitations and Annoyances

This study considers as "limitations" all the factors depending on the language system in use which limit the freedom to choose the places, means and times in which communication can occur. For example, the UN and European Union systems require conference rooms equipped for simultaneous interpretation, and restrict the discussions to the times when the interpreters and a technician are available, whereas the multinational and Esperanto systems allow discussions to take place anywhere – as well in a restaurant or a hunting lodge as in a congress palace – and at any time, even when there is a power failure. When a UN body or a similar institution accepts a government's invitation to meet somewhere in the latter's country, away from headquarters, it must cope with a substantial increase in costs and complications. The costs caused by the interpreters' and translators' traveling, lodging and subsistence are considerable for a large conference, as well as the costs incurred to produce the documents, especially when languages like Chinese and Arabic are included.

The feeling of being at ease, of not risking embarrassment, of enjoying conditions that enable the work to be carried out smoothly, in a pleasant atmosphere, is worth being considered, because it contributes to a large extent to the success of the activities. The word "annoyances", in this paper, refers to all the factors that

thwart that feeling. Many participants in international congresses and conferences find the need to constantly wear earphones and to listen to a voice different from the speakers' to be most unpleasant. Nervous fatigue is worse in a session with simultaneous interpretation than in a monolingual one. However, in a meeting which uses only one language, annoyance resulting in increased tiredness can also appear; it is then linked to the necessity to follow, and to take part in, a debate which is held in a language not completely mastered by the person concerned. Foreign pronunciation may interfere with immediate comprehension and demand a greater effort to follow the discussion.

l) Probable Increase in Disadvantages Over the Next Twenty Years

By their very nature, the multinational and Esperanto systems are not exposed to the risk that disadvantages may increase. The situation is quite different for the multilingual institutions. None of them has taken at the outset a firm decision never to add new languages to the first ones they adopted. In that respect they differ widely from countries where two or more languages have an official status. The more languages are introduced, the more acute the problems become. Adding one language is much more than adding a unit; it is multiplying the language combinations for which translation and interpretation must be provided. That number results from the formula *N (N-1)*. If nine languages are used, 72 combinations must be accommodated; if 15 – for instance the present eleven languages used by the European Union plus Hungarian, Czech, Slovenian and Estonian – 210 language combinations will have to be taken into account, as well at the spoken level as at the level of written documents.

The aggravation of disadvantages concerns essentially the European Union, which has to face a daunting dilemma: guarantee democracy, at the cost of an increase in material complications and budget problems extremely difficult to bear, or ensure a more normal working of all the bodies involved, but achievable only at the expense of democracy.

From the outset, the UN and related organizations have followed a similar path, accepting a gradual increase in the number of working languages. With each new language the functioning of the institutions has become more troublesome. The trend is still active: many are calling for the broadening of the use of German, already partially used as a working language, and a highly active lobby has been pushing to obtain official status for Portuguese, Hindi and Japanese.

m) Terminology

Terminology problems should have been included among the criteria, but it turned out to be impossible, with the available data, to evaluate the influence of this aspect of international communication on the various systems.

In the UN the absence of a precise invariable terminology in Chinese posed serious problems for translators in the 50s and 60s. "You're just doing translation, while we're making up a new language," a reviser in the UN Chinese section told me at the time. Similar difficulties appeared when Arabic was introduced in the seventies.

In the European Union, similar problems, though less serious, are probably presented by Dutch, if one considers the variety of that language, depending on whether it is used in Belgium or in the Netherlands, as well as its instability at the time when the Treaty of Rome was signed, but I have not been able to gather information on the subject. Similarly, modern Greek was not a completely settled language when Greece joined the Union and it would be interesting to know how the Greek translation unit coped with this problem. It is quite likely that terminology problems will arise with the admission of the formerly communist countries.

If an international organization adopted Esperanto, it would have to organize a fairly strong terminological service for that language. In many political, social, scientific and technical fields, Esperanto terminology predates that of Chinese, Arabic and other languages such as Swahili and Modern Hebrew. Furthermore, the language's structures allow for the solution of terminological problems more easily than other, more rigid, languages (Esperanto had a translation of *software* before French). Nevertheless Esperanto terminology has many gaps as far as machine components, technical processes and special items or concepts used in industry, engineering, medicine, pharmacy and other fields are concerned, as well as for precise subdivisions or description elements of products in international commerce. There is a hundred year tradition of how to set up Esperanto terminology through consultation among specialists, but the work to be done is still considerable. Nevertheless, such work would not be greater than that which the UN Chinese translation and terminology units have had to carry out in the fifties and sixties.

NOTE ON ESPERANTO MEETINGS

The observations made in the framework of this research can be readily confirmed for the first three language approaches. Esperanto, on the other hand, is to a large extent unrecognized, even mistaken for a project rather than a language actually in use. Most people have no idea that the language is constantly utilized in certain quarters, and know nothing of the *milieu* in which its functioning can be scientifically researched. Hence the following precisions.

Although limited to a marginal segment of mankind, Esperanto is the vehicle of all sorts of activities, from poetry and song writing to scientific teaching, in many different settings. Since January 1985, it has been every day, somewhere in the world, the language of a congress or conference or some other kind of encounter. (An incomplete list of such meetings can be found on the Internet at: http://www.hungary.net/esperanto).

The data pertaining to the Esperanto system in this study are based on the observation of meetings held under the auspices of a number of organizations and institutions: *Universala Esperanto-Asocio* (Universal Esperanto Association), *Literatura Foiro* (Literary Fair), *Tutmonda Esperantista Junulara Organizo* (World Esperanto Youth Organization), *San Francisco State University, Kultura Centro Esperantista* (Esperanto Cultural Center), *Japana Esperanto-Instituto* (Japanese Esperanto Institute), *Internacia Esperanto-Muzeo* (International Esperanto Museum) and *Internacia Kultura Servo* (International Cultural Service). The research work was done in two parts, the first one in 1986-87 in Beijing, Tokyo, Locarno, Vienna, San Francisco and Zagreb, the second one in 1993-94 at Barcelona, Novosibirsk, La Chaux-de-Fonds and Vienna. Informal meetings in Ottawa, Oslo, Budapest and Helsinki confirmed the observations made during structured sessions. Only discussions in which people representing at least five mother tongues took part were taken into consideration.

As far as written communication is concerned, the study is based on the analysis of correspondence, documents and publications of some of the organizations quoted above, especially the *Kultura Centro Esperantista* an the *Universala Esperanto-Asocio.*

As for the contents, the subjects discussed in the above sample of organizations where Esperanto is used varied widely from the general to the very specific, just as in organizations using other language policies.

COMPARISON OF THE FOUR SYSTEMS ACCORDING TO THE VARIOUS CRITERIA

Under current conditions it is impossible to gather exact figures for each of the criteria that have been defined. For many, an objectively quantifiable result would simply be impossible. The figures which follow are thus evaluations which come from observing the functioning of linguistic communication in organizations of different types, and, for some items, for example the duration of language study, from studies on a statistically representative sample of subjects.

Each of the four systems is rated for each criterion on a ten point scale, according to the importance of the disadvantage which has been observed: 10 indicates a very serious drawback, and 0 the absence of the considered disadvantage, as follows: *0* none, *1* minimal, *2* negligible, *3* small, *4* moderate, *5* medium, *6* considerable, *7* large, *8* very large, *9* enormous, *10* extreme, maximal.

Criterion	*UN*	*Multi-nationals*	*European Union*	*Esperanto*
a) Duration of language study (participants)	8	8	0	3
b) Prior investment by governments	9	9	5	0
c) Prior investment by institutions	8	0	10	0
d) Inequality and discrimination	6	5	0	0
e) Language costs of meetings	7	0	10	0
f) Language cost of document production	6	0	10	0
g) Waiting time for documents	6	0	6	0
h) Loss and distortion of information	5	4	6	0
i) Language handicap (speech, hearing)	5	6	0	1
j) Language handicap (reading)	3	4	0	1
k) Limitations and annoyances	8	3	8	0
l) Probable future increase of drawbacks	5	0	10	0
Total level of disadvantages	76	39	65	5

The figures noted above can be considered unreliable, since they result from simple evaluations lacking a sufficiently objective basis. It may thus be interesting to see what happens if they are replaced by a binary system, in which 1 means "this disadvantage is present" and 0 "this disadvantage does not exist". If we

switch to such a system, which can be deemed to be objective, it is significant that the communication system with the most advantages is still the fourth one, although this calculation method is particularly unfair to it. Indeed, if six months of Esperanto afford a communication level demanding six years for another language, it does not give a fair picture to give all systems which require language learning an equal mark of 1 for this first criterion. But at least this way of reckoning precludes the justified criticism of subjective rating. Furthermore, in order to give all other three systems the best chances, we can remove criterion b (previous government's investment) for the European Union and add it to the fourth column, considering that, if the Esperanto system were adopted, governments might feel called upon to organize teaching of that international language.

Criterion	*UN*	*Multi-nationals*	*European Union*	*Esperanto*
a) Duration of language study (participants)	1	1	0	1
b) Prior investment by governments	1	1	0	1
c) Prior investment by institutions	1	0	1	0
d) Inequality and discrimination	1	1	0	0
e) Language costs of meetings	1	0	1	0
f) Language cost of document production	1	0	1	0
g) Waiting time for documents	1	0	1	0
h) Loss and distortion of information	1	1	1	0
i) Language handicap (speech, hearing)	1	1	0	1
j) Language handicap (reading)	1	1	0	1
k) Limitations and annoyances	1	1	1	0
l) Probable future increase of drawbacks	1	0	1	0
Total level of disadvantages	12	7	7	4

CONCLUSION

Observation of linguistic communication according to the four approaches currently in use at the international level reveals that the Esperanto system offers the most advantages, as well for the individual participants as for the governments and for the organizations in whose framework international communication is taking place. In other words, it is, with the multinational system, the most cost effective, but it has, over the latter, the important advantage of avoiding discrimination and inequality among the persons concerned, and of demanding much less time and effort for the participants to reach the required level of linguistic competence.

However, this system has to face up to an enormous disadvantage which has not been mentioned above: apart from a few private organizations, its introduction would have to be organized from scratch. In itself, this would not be so difficult, because of the linguistic favorable qualities of Esperanto and the fact that it is so well adapted to the functioning of the human brain. But the question of the most appropriate system of linguistic communication in international settings must be approached against a whole background of political, social, cultural and economic forces which favor inertia and the preservation of privileges rather than a radical change leading to a more cost effective and democratic solution, putting all cultures on an equal footing. In proportion to the world population, few people have the ability to really master English, yet the trend in international communication in recent years has been towards the multinational system, based on the use of that language only. This has brought about the creation of a linguistic elite, which does not want to lose the many advantages it derives from belonging to the small circle of those who can take part in global communication.

Such being the situation, it might be warranted to include two additional criteria in the table presented above. They would refer to two disadvantages that might be called "organizing the teaching of Esperanto all through the world" on the one hand, and "overcoming the force of inertia" on the other. It is interesting to note that if, for these two additional points, we give the maximum mark (10) to the Esperanto system, and the minimum one (0) for the three others, the figure summing up the drawbacks increases to 25 for Esperanto, but remains well below the drawback level of the others (UN 76, Multinationals 39, European Union 65). A similar result is obtained with the binary ratings, in which a drawback, whatever its weight or extent, is rated at 1: adding 2 to the Esperanto option still leaves it as the system with the most advantages.

Shouldn't this be kept in mind whenever language use at the international level is being debated?

REFERENCES

[1] C.E. King, A.S. Bryntsev, F.D. Sohn. *Report on the implications of additional languages in the United Nations system*. Geneva: UN, Joint Inspection Unit, 1977, document A/32/237.

[2] League of Nations. *L'espéranto comme langue auxiliaire internationale.* Rapport du Secrétariat general, adopté par la Troisième Assemblée. Geneva: League of Nations, 1922.

[3] Joint Inspection Unit. *Evaluation of the Translation Process in the United Nations System*. Geneva: UN, 1980; document JIU/REP/80/7.

[4] Roman Rollnick. "Word mountains are costing us a fortune". *The European*, December 20-22, 1991.

[5] Jean de la Guérivière. "Babel à Bruxelles". *Le Monde*, January 12, 1995, p. 15.

[6] European Parliament. *Rapport sur le droit à l'utilisation de sa propre langue*. March 22, 1994, Document A3-0162/94, DOD.FR/RR/249/249436.MLT PE 207.826.

[7] Pierre Janton. "La résistance psychologique aux langues construite, en particulier à l'espéranto". In *Actes – Journée d'étude sur l'espéranto* (Paris: University of Paris-8, 1983), p. 70.

CLAUDE PIRON (1931), lecturer in the Faculty of Psychology and Education at the University of Geneva, worked for many years as a translator of English, Chinese, Spanish and Russian at the World Health Organization and the United Nations.

Leading the field in sociology and the related social sciences:

sociological abstracts (sa)

and

Social Planning / Policy & Development Abstracts (SOPODA)

Our subject specialists track the broad spectrum of theoretical and applied sociology from the more than 1,800 discipline-specific and related journals published in North America, Europe, Asia, Africa, Australia, and South America.

sa and **SOPODA** each offer you in-depth abstracts and precise indexing of timely journal articles and books, enhanced dissertation listings, and a bibliography of book reviews from the journals screened.

sa and **SOPODA** are available together on the **socioflle** CD-ROM and are hosted online by BRS, DATA-STAR, DIALOG, and DIMDI. Hardcopy subscriptions can be ordered from the address below.

The **sa** and **SOPODA** information products are supported by:

- Database-specific user manuals
- The latest journal coverage list
- The **socioflle** Quick Reference Guide and User's Handbook
- The **Thesaurus of Sociological Indexing Terms**
- Your Guide to Searching **sa** using a Personal Computer
- A professional workshop program

The **sa** family of databases — your fast track to the information you need, in the format you want.

sociological abstracts, inc.

p.o. box 22206 • san diego, ca 92192-0206
phone (619) 695-8803 / FAX (619) 695-0416 / Help Desk (800) 752-3945

Publication list of Esperanto Documents

No.	Title
1.	Unesco and the UEA *
2.	Universal Esperanto Association, Annual Report 1974-75 *
3.	The 60th Universal Congress of Esperanto *
4.	The development of poetic language in Esperanto *
5.	The contribution of the Universal Esperanto Association to world peace *
6.	An introduction to Esperanto Studies *
7.	Esperanto on the air
8.	The Universal Esperanto Association in International Women's Year 1975 *
9.	International travel by speakers of Esperanto *
10.	Universal Esperanto Association, Annual Report 1975-76
11.	Language problems and the Final Act *
12.	Esperanto and the Universal Esperanto Association *
13.	Language and the right to communicate *
14.	Esperanto and older people
15.	Language and international communication: The right to communicate
16.	The use of the International Language Esperanto as a partial solution to language problems in international nongovernmental organizations: Some recommendations *
17.	Understanding among Africans: Linguistic isolations and linguistic communication *
18.	The future of modern languages in English-speaking countries
19.	The cultural value of Esperanto *
20.	Translation in International Organizations *
21.	Language equality in international cooperation *
22.	Esperanto: European or Asiatic language? *
23.	Esperanto and the Universal Esperanto Association
24.	Resolutions of the 65th World Esperanto Congress
25.	Constitution of the Universal Esperanto Association
26.	The language problem in the Non-Aligned Movement
27.	Esperanto in the service of the United Nations *
28.	Current work in the linguistics of Esperanto *
29.	Esperanto and literary translation
30.	Esperanto and the International Year of Disabled Persons 1981
31.	The educational value of Esperanto study: An American view *
32.	Unesco and the UEA 1976-1982
33.	World Communications Year: Social and linguistic aspects of modern communication
34.	The language problem in tourism *
35.	A history of the World Esperanto Youth Organization
36.	A lingua franca for Africa *
37.	The contribution of the Universal Esperanto Association to world peace *
38.	The language problem in science and the role of the International Language Esperanto
39.	The International Language Esperanto 1887-1987: Towards the second century
40.	Esperanto: A review of its present situation *
41.	Europe's Babylon: Towards a single European Language?
42.	Psychological reactions to Esperanto
43.	Esperanto Studies: An Overview
44.	A Policy for Esperanto
45.	The work of the Universal Esperanto Association for a more peaceful world
46.	Linguistic Communication: A Comparative Field Study

Several of the above documents are also available in French and Esperanto.
** Out of print*

National Esperanto organizations in English speaking countries

Australia: **Australian Esperanto Association**, 143 Lawson St., Redfern NSW 2016; ☎ (02)9698-2729; 💻 esperfrd@ans.com.au

Canada: **Canadian Esperanto Association**, P.O. Box 2159, North Saanich BC V8L 3S6

Great Britain: **British Esperanto Association**, 201 Felixstove Rd., Ipswich IP3 9BJ

India: **Esperanto Federation of India**, 5 Archana Corner, Sahyadri Park, Salunkhe Vihar Rd., Pune IN-411048; ☎+fax (20)842-323; 💻 helpo@vsnl.com

Ireland: **Esperanto Association of Ireland**, 9 Templeogue Wood, Dublin 6W; ☎ (01)490-2919

New Zealand: **New Zealand Esperanto Association**, P.O. Box 8140, Symonds St., NZ-1035 Auckland; ☎ (9)579-4767; fax (9)579-1070; 💻 neelam@voyager.co.nz

South Africa: **Esperanto Association of South Africa**, 75 Bronkhorst St., ZA-0181 Groenkloof; ☎ (012)468-767

USA: **Esperanto League for North America**, P.O. Box 1129, El Cerrito CA 94530; ☎ (510)653-0998; fax (510)653-1468; 💻 elna@esperanto-usa.org